

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/004787

International filing date (day/month/year)
18.02.2004

Priority date (day/month/year)
18.02.2003

International Patent Classification (IPC) or both national classification and IPC
H04Q7/38

Applicant
QUALCOMM INCORPORATED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-9,11-17,19-26,28-33
	No: Claims	1,10,18,27
Inventive step (IS)	Yes: Claims	2-4,13-15,19-21,31-33
	No: Claims	1,5-12,16-18,22-30
Industrial applicability (IA)	Yes: Claims	1-33
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

1. The following documents are referred to in this communication:

D1 : WO 98/35525 A (QUALCOMM INC) 13 August 1998 (1998-08-13)
D2 : WO 00/72622 A (QUALCOMM INC) 30 November 2000 (2000-11-30)
D3 : "MOBILE STATION-BASE STATION COMPATIBILITY STANDARD FOR
WIDEBAND SPREAD SPECTRUM CELLULAR SYSTEMS" TIA/EIA
INTERIM STANDARD, 3 February 1999 (1999-02-03), pages 6-380,6,
XP002145331

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1, 10, 18 and 27 is not new in the sense of Article 33(2) PCT.

Using the wording of independent claim 1, document D1, which is regarded as being the closest prior art, discloses (the references in parenthesis applying to this document):

"A wireless communication system comprising:
a network;
a first base station coupled to the network; and
a mobile station coupled to the base station via a wireless communication link (figure 1);
wherein the network is configured to direct the mobile station to enter or leave soft handoff status (page 11, lines 11-13; page 12, lines 9-15); and
wherein the mobile station is configured to modify a set of transmission parameters in response to the network directing the mobile station to enter or leave soft handoff (page 11, lines 13-22; page 12, lines 29-35; page 17, lines 13-17)."

It is considered that when allocating supplemental channels or when performing power control, the mobile station modifies a set of transmission parameters.

The applicant should also take into account that the features defined in claim 1 are already known also from document D2 (see figure 1; page 12, lines 5-32; page 13, lines 16-23) wherein it is considered that the assignment of a Walsh code channel for the F-DCCH is a modification of the transmission parameters.

Independent claims 10, 18 and 27 define the equivalent features in terms of a mobile station, a method implemented in a wireless communication system and a method implemented in a mobile station to the corresponding wireless communication system defined in claim 1.

Therefore, the subject-matter of independent claims 1, 10, 18 and 27 is not new.

3. Dependent claims 5-9, 11, 16, 17, 22-26 and 28-30 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT) for the reason that the subject-matter of said claims is either in principle directly derivable from the disclosure of document D1 (see page 10, line 38-page 11, line 13; page 12, line 1-page 12, line 35 for claims 5-8, 16, 22-25, 28 and 29) or the disclosure of document D3 (figure B-7, for claims 9, 17, 26 and 30). Thus, dependent claims 5-9, 11, 16, 17, 22-26 and 28-30 do not meet the requirements of Article 33(3) PCT.
4. The combination of the features of dependent claims 2-4, 13-15, 19-21 and 31-33 are neither known from, nor rendered obvious by, the available prior art. The reasons are as follows:
 - 4.1 Document D1 discloses a wireless communication system configured to direct the mobile station to enter or leave soft handoff status and wherein the mobile station is configured to modify a set of transmission parameters in response to the network directing the mobile station to enter or leave soft handoff (page 11, lines 11-22; page 12, lines 9-15; page 29, lines 29-35; page 17, lines 13-17).
 - 4.2 The subject-matter of dependent claim 2 differs from the wireless communication system from document D1 in that the transmission parameter comprises a frame size that is modified when entering or leaving a soft handoff situation.
 - 4.3 The problem to be solved by the present invention may be regarded as the radio resources consumption needed when in a soft handoff situation, signalling messages have to be transmitted to the mobile station in order to minimise interferences and maximizing the data throughput.
 - 4.4 None of the prior art documents as cited in the search report disclose or suggest the combination of features defined in dependent claim 2.
 - 4.5 Dependent claims 13, 19 and 31 define the equivalent features in terms of a mobile station and method to the corresponding wireless communication system claim 2.

- 4.6 The subject-matter of dependent claims 2, 13, 19 and 31 is therefore new (Article 33(2) PCT) and is considered as involving an inventive step (Article 33(3) PCT).
- 4.7 The dependent claims 3, 4, 14, 15, 20, 21, 32 and 33 add further features to the subject-matter of claims 2, 13, 19 and 31 and are also in line with the requirements of Article 33(1) PCT.